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File: USPT

Jul 24, 2001

DOCUMENT-IDENTIFIER: US 6264614 B1

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TITLE: System and method for generating and transferring medical data

Abstract Text (1):

A computer site includes a data generating source. The source may include a device (e.g. a heart monitor) which may be manipulated by the patient to sense a biological function or condition such as a heart beat. The device outputs an audible signal in response to the monitored condition. A computer that can be operated by the patient or other initial user at the site runs a program that processes an electric signal generated in response to the audible signal as received through a microphone connected to the computer. The program is downloaded or otherwise accessed through a computer communications network (e.g. Internet). The computer sends resulting data signals over this network. Using a plurality of the foregoing components, any number of patients (or other users) that can access the computer communications network can provide real-time information about their personal medical condition (or other generated data) to their personal medical care providers (or other remote end users).

Brief Summary Text (10):

In a preferred embodiment, a device that can be manipulated by a patient senses some function or condition of the patient. One example is a small, inexpensive, hand-held heart monitor that a patient can hold against his or her chest; when used, the device outputs an audible signal responsive to the beating of the heart, such as the electrocardiogram. A computer that can be operated by the patient runs a program that processes an electric signal generated in response to the audible signal as received through a microphone connected to the computer. The computer can send resulting data signals over a computer communication network and preferably over a global communication network such as the Internet. Using a plurality of the foregoing components, any number of patients that can access the computer communication network can quickly, easily, inexpensively, and accurately provide real-time information about their personal medical condition to their personal medical care providers. The real-time information can also be used locally such as by the individual during exercise or simply while trying to monitor or modulate the sensed condition (e.g., to lower heart rate, blood pressure, or stress).

Brief Summary Text (26):

Still another definition of a method of monitoring biological functions and conditions of a plurality of patients in accordance with the present invention comprises: distributing to each patient at least one sensor to detect at least one biological function or condition of the patient; and maintaining a medical data acquisition and transmission program at an Internet site accessible by the patients such that the patients can use, from computers at the locations of the patients, the medical data acquisition and transmission program to control their respective computers to receive and process signals from the patients' respective sensors and to transmit medical data onto the Internet in response thereto. This method can further comprise distributing to a plurality of physicians receivers (with or without transmitting capability) for receiving at least portions of the medical data transmitted over the Internet. It can still further comprise providing a combination Internet receiving and paging or other wireless communication network

transmitting site to receive the medical data transmitted on the Internet and to transmit received medical data to at least one respective physician's receiver through the wireless network. The method can also comprise marking each sensor with indicia defining the address of the Internet site.

Detailed Description Text (3):

Although only one patient site need be present, typically there will be a plurality of patient sites 2a-2n (the term "patient" as used herein is not limited to someone who is ill or who is necessarily under a medical provider's care; it simply refers to an individual using the present invention in the medical context). These sites are wherever the patient (or, more broadly, initial user or simply some data generating source) is and has access to a computer and communication network, which is specifically illustrated as including the Internet 4 in the drawings and in the remainder of the following description of the present invention (the term "Internet" as used herein encompasses the global computer network commonly known by that name, any functional part of it suitable for use in the present invention (e.g., the World Wide Web), and any other suitable global computer network capable of providing the communication link of the present invention). Also connected to the Internet 4 is at least one remote site 6 with which the patient sites 2a-2n can communicate.